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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,362	07/11/2001	Felix Achille	44452A	9554

109 7590 02/23/2006

THE DOW CHEMICAL COMPANY
INTELLECTUAL PROPERTY SECTION
P. O. BOX 1967
MIDLAND, MI 48641-1967

EXAMINER
TRAN, THAO T

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/903,362	ACHILLE, FELIX	
	Examiner	Art Unit	
	Thao T. Tran	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/05/05 AND 8/22/05*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6, 8-11 and 32-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-11 and 32-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This is in response to the Replies filed 12/05/2005 and 8/22/2005.

2. Claims 1-6, 8-11, and 32-40 are currently pending in this application. Claims 7 and 12-31 have been previously canceled.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Korpman (US Pat. 4,318,408).

Korpman teaches an extruded thermoplastic superabsorbent polymer composition and a method of making, the composition comprising a water-swellable organic polymer imbedded in a water-insoluble non-swelling matrix of an elastomeric polymer (see abstract).

Korpman teaches that the absorbent polymers (superabsorbent) include acrylate polymer, acrylate modified polysaccharides, and crosslinked carboxylmethyl cellulose (see col. 4, ln. 7-43). The elastomeric polymers include block copolymers of styrene, butadiene, ethylene, butylenes, propylene (see col. 8, ln. 45-59, col. 9, ln. 29-39). Korpman teaches the blend further comprising an emulsifier (surfactant) (see col. 7, ln. 30). The blend is extruded to form the product (see col. 10, ln. 10-12).

Although Korpman does not specifically teach how the elastomeric polymers interact with the absorbent polymers, or the melt draw down rate of the polymer blend, since Korpman teaches the same chemical constituents of the blend, these properties would inherently be the same as presently claimed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-6, 8-11, 32-33, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korpman.

Korpman teaches an extruded thermoplastic superabsorbent polymer composition and a method of making, the composition comprising a water-swellable organic polymer imbedded in a water-insoluble non-swelling matrix of an elastomeric polymer (see abstract).

Korpman teaches that the absorbent polymers (superabsorbent) include acrylate polymer, acrylate modified polysaccharides, and crosslinked carboxylmethyl cellulose (see col. 4, ln. 7-43). The thermoplastic elastomeric polymers include block copolymers of styrene, butadiene, ethylene, butylenes, propylene (see col. 8, ln. 45-59, col. 9, ln. 29-39). Korpman teaches the blend further comprising an emulsifier (surfactant) (see col. 7, ln. 30). The blend is extruded to form the product (see col. 10, ln. 10-12).

Although Korpman does not specifically teach how the thermoplastic elastomeric polymers interact with the absorbent polymers, or the melt draw down rate of the polymer blend, since Korpman teaches the same chemical constituents of the blend, these properties would inherently be the same as presently claimed.

Korpman discloses the extruded composition further includes a minor amount of additives (see col. 10, ln. 46-54). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have excluded the additives as taught by Korpman, since the addition of these additives would not have affected the chemical properties of the extruded composition.

Korpman further teaches the absorbent polymer is about 5-200 parts for every 100 parts by weight of the matrix polymers, which would translate into about 5-67% weight in the blend, overlapping the instantly claimed range. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have selected the overlapping portion as taught by Korpman, because by teaching the overlapping portion Korpman directly teaches the use of a concentration within the instantly claimed range. See MPEP 2144.05, subsection I.

Allowable Subject Matter

7. Claims 34-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: no prior art has been found to teach, disclose, or fairly suggest an extruded, melt-mixed thermoplastic resin polymer blend composition, consisting essentially of an ethylene/n-butylacrylate/carbon monoxide terpolymer or an ethylene/vinyl acetate/carbon monoxide terpolymer; in combination with all of the other limitations in claims 34 and 1 or in claims 35 and 1.

Response to Arguments

9. Applicant's arguments filed on 8/22/2005 have been fully considered but they are not persuasive.

Throughout the Remarks, Applicants contend that Korpman does not teach a thermoplastic resin, but rather of elastomeric resin. And only in col. 14, that Korpman discloses a thermoplastic resin. However, throughout the specification, Korpman discloses the use of thermoplastic elastomer. As illustrated in column 10, lines 42-45, Korpman mentions a composition including a rubber or thermoplastic elastomer and particulate polymer absorbent. With respect to whether the resin would be more thermoplastic or more elastomeric, Korpman teaches the thermoplastic blocks constitute about 5-50% by weight of the resin (see col. 9, ln. 21-23). Thus, the resin may also be thermoplastic as well as elastomeric.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt
February 21, 2006

Thao Tran

THAO T. TRAN
PATENT EXAMINER